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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,915	12/02/2005	Burkhard Frensch	2002P148S9WOUS	9054

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Siemens Corporation  
Intellectual Property Department  
170 Wood Avenue South  
Iselin, NJ 08830

EXAMINER
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SINGH, HIRDEPAL

ART UNIT	PAPER NUMBER
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2112

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/527,915

Applicant(s)

FRENSCH ET AL.

Examiner

Hirdepal Singh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date March 2005.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

This action is in response to the original filing date of March 16, 200~~0~~5 (Priority Date: Sep 16, 2002). Claims 25-48 are pending and have been considered below.

#### *Specification*

1. The disclosure is objected to because of the following informalities: Throughout the specifications the Applicant is using numerous acronyms (HMI, SCADA, ODBC, OLE DB, ADO, SQL, PC, lacuna, www, HTTP) etc. without describing them. Examiner suggests to describe the acronyms where they are used first time, as correctly described on page1 last paragraph [(O&M) operating and monitoring systems].

Appropriate correction is required.

2. The use of the trademark MICROSOFT has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

3. The disclosure is objected to because of the following informalities: this Application has extraneous information on top of each page (WO 2004/027531, PCT/DE2003/002887) throughout the specifications pages 1-21.

Appropriate correction is required.

### ***Claim Objections***

4. Claims 47, and 48 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 47 has a database for archiving acquired process information data for evaluating/representing the information (same as claim 25c).

Claim 48 has a computer program product to operate/ monitor a production process (claim 25).

Note: if claims 47, and 48 are made independent in the present form, they will have statutory problems based on 35 U.S.C. 101.

5. Claims 34, and 35 are objected to because of the following informalities: In both these claims applicant is using the phrase "the SCADA clients", however these claims are dependent on claim 32 which is dependent on claim 28, which is off 25, In this chain of claim "SCADA clients" is not used. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 31, 34, and 35 recites the limitation "SCADA" in lines 2, 3, and 2 respectively. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 39 recites the limitation "SQL" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Examiner suggests to explain all the acronyms used in the application.

### ***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 25-35, 40, 42, 43, 47, and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by Birchenough et al. (US 6,615,091).

Claims 25, 47, and 48: Birchenough discloses a system and method for controlling and monitoring a production process, comprising;

a. a process controller, provide control signals to and receives information data from, a designated process control module (column 25, lines 52-60);

b. transfer device transmits data information to the process station controller  
(column26, lines 22-24);

c. a distributed data system log storage contains a history (historian database) of  
all data transactions(column57, lines 52-55) and (column58, lines 55-60).

Claim 26: Birchenough discloses a system and method for controlling and monitoring a  
production process as in claim 25 above, and further disclose an input output model that  
has encapsulation components coupled to a configuration store (fig 81; column53, lines  
10-15).

Claim 27: Birchenough discloses a system and method for controlling and monitoring a  
production process as in claim 25 above, and further discloses a controller that checks  
for a warning, if so outputs a warning (alarm) message (figs 73, and 74; column45, lines  
27-30).

Claim 28: Birchenough discloses a system and method for controlling and monitoring a  
production process as in claim 25 above, and further discloses an independent interface  
to provide a server client relationship (fig 86; column56, lines 28-32).

Claim 29: Birchenough discloses a system and method for controlling and monitoring a  
production process as in claim 28 above, and further discloses a user interface portion,  
made up of hardware panel clients, web clients etc. could have telnet session

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(communication) with user interface through a network (internet, ethernet) (figs 85, and 86; colmn56, lines 50-65).

Claim 30: Birchenough discloses a system and method for controlling and monitoring a production process as in claim 29 above, and further discloses a system employing an interface with web browsers (fig 85; colmn55, lines 14-22) and also discloses a web server that acts as a broker between web browser and user interface (fig 86; colmn57, lines1-3).

Claim 31: Birchenough discloses a system and method for controlling and monitoring a production process as in claim 28 above, but doesn't explicitly disclose that the clients are embodied as SCADA clients. Applicant is not describing that the SCADA clients have any supervisory control. This is just an intended use, therefore no patentable weight is given to SCADA clients. Furthermore, This is inherent that the client could have supervisory control of the system (colmn31, lines 19-21).

Claim 32: Birchenough discloses a system and method for controlling and monitoring a production process as in claim 28 above, and further discloses an independent client of the system (fig 77; colmn46 lines 51-56, colmn47 lines 65-67, and colmn48 lines1-18).

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Claim 33: Birchenough discloses a system and method for controlling and monitoring a production process as in claim 32 above, and further discloses the historical data being analyzed and presented in various forms (column58, lines 52-63).

Claims 34, and 35: Birchenough discloses a system and method for controlling and monitoring a production process as in claim 32 above, and further discloses the functionality of the clients of the system as communicating with the system, sending/receiving and displaying the process data (column47; lines 35-46, and column46, lines 50-57). (Applicant doesn't describe the specific functionality of the clients, Examiner assumes that the minimum functionality of the independent, SCADA clients is to communicate with the system, and to send/receive and analyze, and display the process data.)

Claim 40: Birchenough discloses a system and method for controlling and monitoring a production process as in claim 25 above, and further discloses a communication link that allows a user (client) to retrieve/access data information (column26, lines 38-58).

Claim 42: Birchenough discloses a system and method for controlling and monitoring a production process as in claim 25 above, and further discloses an interface that allows communication between the system and web browsers (clients) etc. (fig85; column55 lines 15-22), and also discloses bi-directional communication between client and server (column48, lines 18—20).



Claim 43: Birchenough discloses a system and method for controlling and monitoring a production process as in claim 25 above, and further discloses that a client/operator can control the system and has the ability to start, stop, configure, and obtain the information (column 46, lines 35-40).

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 36, and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birchenough.

Claim 36: Birchenough discloses a system and method for controlling and monitoring a processing operation as in claim 32 above, but doesn't explicitly disclose the functionality of clients is in standard applications. However, Official notice is taken that it is old and well known in the computer arts to use standard computer applications for displaying the information data. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the standard applications functionality of the clients to display the information data. One would have been motivated to have the clients with standard office application functionality for

displaying the information data for any further use.

Claim 44: Birchenough discloses a system and method for controlling and monitoring a production process as in claim 25 above, but doesn't explicitly disclose that the system for operating and monitoring is provided for managing users of the system and/or for planning process communication and/or a security system, examiner note that this is just an intended use of the system and is not a part/structure of the system, therefore no patentable weight is given, furthermore it would have been obvious to one of ordinary skills in the art at the time the invention was made that the system could be provided for managing users of the system and/or for planning process communication and/or a security system. One would have been motivated to have the system for operating and monitoring provided for managing users of the system and/or for planning process communication and/or a security system or any combination thereof.

Claim 45: Birchenough discloses a system and method for controlling and monitoring a production process as in claim 25 above, but doesn't explicitly disclose that the system for operating and monitoring is of redundant design, with redundancy also existing for independent clients. However, Official notice is taken that it is old and well known within the computer art to have redundant mechanisms to ensure that the work can resume immediately in case of total outage and/or to have fast access to data in case of overload conditions. Therefore, it would have been obvious to one having ordinary skills in the art at the time the invention was made to have the system for

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operating and monitoring of redundant design with redundancy also existing for independent clients. One would have been motivated to have redundant mechanisms in the system to ensure uninterrupted work and fast access to the information data.

Claim 46: Birchenough discloses a system and method for controlling and monitoring a P roduction process as in claim 25 above, and further discloses a network proxy for communication between client and server (fig 77, and 78; colmn48, lines 2-15), but doesn't explicitly disclose a multiplexer component for concealing a redundancy and/or a plurality of data servers. However, Official notice is taken that it is old and well known within the computer art to have redundant mechanisms in the systems and multiplexers for concealing the redundancy. Therefore, it would have been obvious to one having ordinary skills in the art at the time the invention was made to have the system for operating and monitoring with a multiplexer to switch the client to the redundant mechanism in case of failure . One would have been motivated to have multiplexer component in the system for concealing a redundancy and/or a plurality of data servers.

13. Claims 37, 39, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birchenough et al. (US 6,615,091) in view of Nixon et al. (US 2002/0077711).

Claim 37: Birchenough discloses a system and method for controlling and monitoring a production process as in claim 25 above, but doesn't disclose that the system has a

central database for fast archiving of data. Nixon discloses a similar system for controlling and monitoring a process that further discloses enabling different data sources to provide process information data to the system for use as a central database (fig 2; paragraphs 66, and 82; specs). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to collect all the process information data in Birchenough as a single/central database. One would have been motivated to make all process information data available as a central database to manipulate, organize, and provide fast access for different applications.

Claim 39: Birchenough and Nixon disclose a system and method for controlling and monitoring a production process as in claim 37 above, and further disclose that the clients are accessing the data through the interfaces, but neither reference explicitly disclose accessing the database by SQL (Structured Query Language) queries.

However, Official notice is taken that it is old and well known in the computer arts to retrieve and manipulate data using SQL. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use SQL queries to access the database. One would have been motivated to use a standard computer language as SQL to access, create, modify, retrieve, and manipulate data in the database.

Claim 41: Birchenough and Nixon disclose a system and method for controlling and monitoring a production process as in claim 39 above, and further disclose that the

system has communication link to provide remote access and allows the retrieval of data (column 26, lines 39-52) Birchenough, and Nixon (paragraph 0009; specs), but neither reference explicitly disclose that the standard interface is SQL. However, Official notice is taken that it is old and well known in the computer arts to retrieve and manipulate data by SQL through the standard interfaces. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use standard interface with SQL to access the database remotely. One would have been motivated to use standard interface with SQL to access database remotely such as through the internet.

14. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Birchenough et al. (US 6,615,091) in view of Nixon et al. (US 2002/0077711) as applied to claim 37 above, and further in view of Lewis et al. (US 5,812,394).

Claim 38: Birchenough and Nixon discloses a system and method for controlling and monitoring a production process as in claim 37 above, but neither explicitly disclose that the database is relational database. However, Lewis discloses a similar system for controlling and monitoring a process that further discloses the configuration is performed with tools such as relational database (column 6, lines 22-30). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the database of Birchenough relational. One would have been motivated to have relational database to enhance the speed and performance of the

system for controlling and manufacturing.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hirdepal Singh whose telephone number is 571-270-1688. The examiner can normally be reached on Mon-Fri (Alternate Friday Off) 9:00am-5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Myhre can be reached on 571-270-1065. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

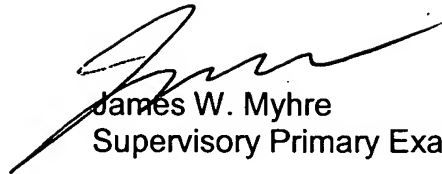
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H.S.

Dec 27, 2006



James W. Myhre  
Supervisory Primary Examiner